
**Implants for surgery — Ceramic
materials —**

**Part 1:
Ceramic materials based on high
purity alumina**

Implants chirurgicaux — Matériaux céramiques —

Partie 1: Matériaux céramiques à base d'alumine de haute pureté

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 6474-1:2019

<https://standards.iteh.ai/catalog/standards/iso/25815429-da99-463d-9f4b-f97e281db32b/iso-6474-1-2019>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 6474-1:2019

<https://standards.iteh.ai/catalog/standards/iso/25815429-da99-463d-9f4b-f97e281db32b/iso-6474-1-2019>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Classification	3
4.1 Material types	3
4.2 Test categories	3
4.2.1 General	3
4.2.2 Category 1: Required tests representative for the periodical production control	3
4.2.3 Category 2: Required tests representative for the general material specification	3
4.3 Material properties	3
5 Preparation of specimens	5
6 Test methods	5
6.1 Bulk density	5
6.2 Chemical composition	5
6.3 Microstructure	5
6.4 Strength properties	6
6.4.1 General	6
6.4.2 Biaxial flexural strength	6
6.4.3 4-point flexural strength	7
6.4.4 Weibull modulus	7
6.5 Young's modulus	7
6.6 Fracture toughness	7
6.6.1 General	7
6.6.2 SEVNB	7
6.6.3 SEPB	8
6.6.4 SCF	8
6.7 Hardness	8
6.8 Wear	8
6.9 Cyclic fatigue	8
Bibliography	9